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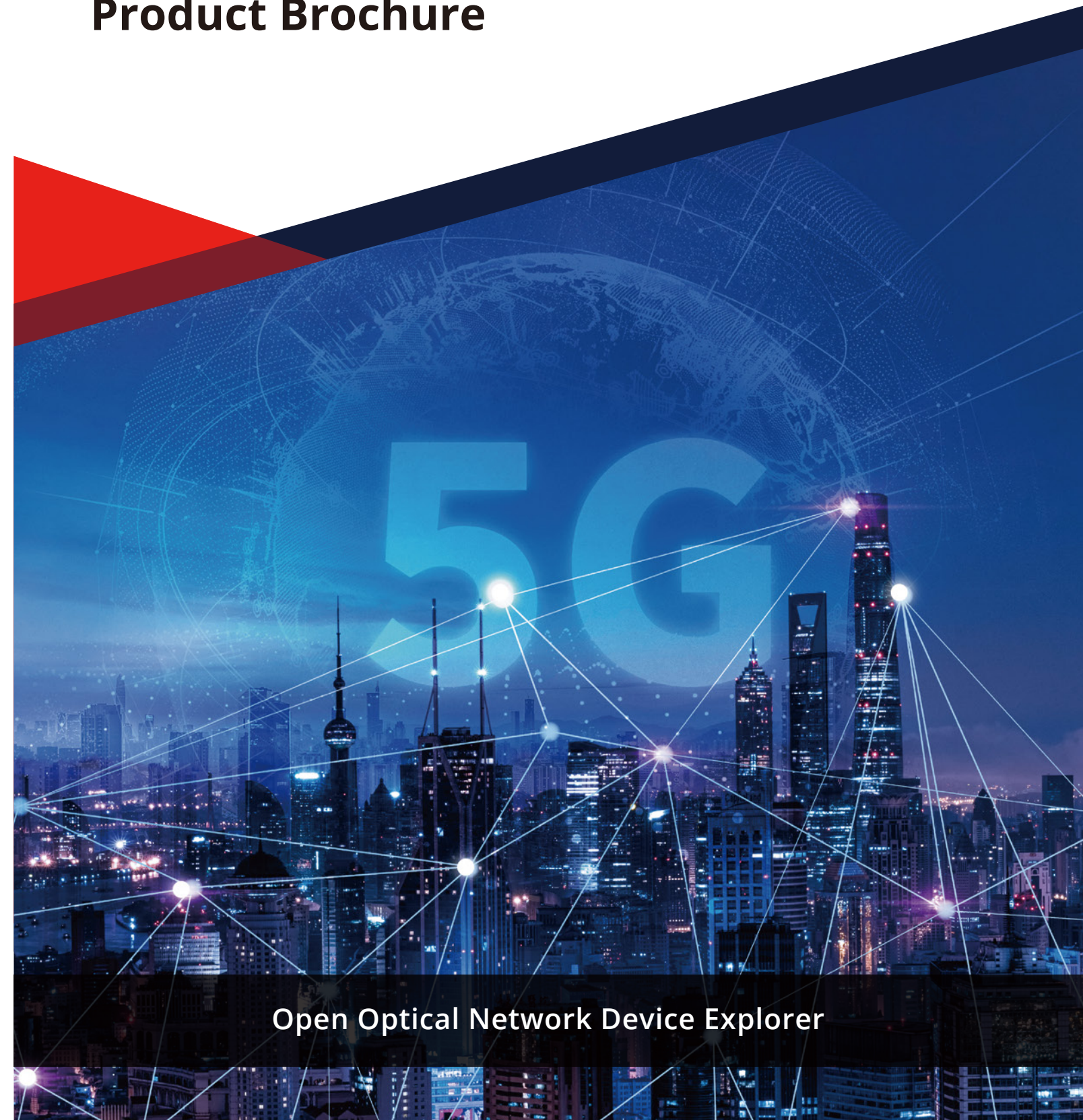
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GIGALIGHT 5G & Metro/Telecom Product Brochure



Open Optical Network Device Explorer

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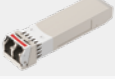













10G Optical Transceivers

Gigalight provides a complete 10G industrial-grade optical transceiver for 5G fronthaul and metro telecom transmission, which complies with 10G Ethernet and optical transport network (OTN OTU2e), and is also compatible with 10G CPRI and synchronous optical network (SONET OC-192 / SDH STM -64) and 10G Fiber Channel, supporting a transmission distance of 300m to 80km. They have very competitive cost performance, reliable quality and stability, and are ideal for 5G fronthaul network deployment.

Images	Product Name	TX	RX	Max. Power Consumption	Reach	Temp (°C)	Part Number
	10G SFP+ SR	850nm VCSEL	PIN	1W	300m	-40~+85	GPP-85192-SRT
	10G SFP+ LR	1310nm DFB	PIN	1W	10km/20km	-40~+85	GPP-31192-LRT GPP-31192-L2C
	10G SFP+ ER	1550nm EML	PIN	1.5W	40km	0~70	GPP-55192-ERC
	10G SFP+ ER	1310nm DFB	APD	1W	40km	0~70	GPP-31192-ERC
	10G SFP+ ZR	1550nm EML	APD	2W	80km	-40~+85	GPP-55192-ZRT
	10G SFP+ BR10-U	1270/1330nm DFB	PIN	1.5W	10km	0~70	GBP-2733192-LRC
	10G SFP+ BR10-D	1330/1270nm DFB	PIN	1.5W	10km	0~70	GBP-3327192-LRC
	10G SFP+ BR20-U	1270/1330nm DFB	PIN	1.5W	20km	0~70	GBP-2733192-L2C
	10G SFP+ BR20-D	1330/1270nm DFB	PIN	1.5W	20km	0~70	GBP-3327192-L2C
	10G SFP+ BR40-U	1270/1330nm DFB	PIN	1.5W	40km	0~70	GBP-2733192-ERC
	10G SFP+ BR40-D	1330/1270nm DFB	PIN	1.5W	40km	0~70	GBP-3327192-ERC
	10G SFP+ BR60-U	1270/1330nm DFB	APD	1.5W	60km	0~70	GBP-2733192-E6C
	10G SFP+ BR60-D	1330/1270nm DFB	APD	1.5W	60km	0~70	GBP-3327192-E6C
	10G SFP+ BR80-U	1490/1550nm DFB	APD	1.5W	60km	0~70	GBP-2733192-E6C
	10G SFP+ BR80-D	1550/1490nm DFB	APD	1.5W	60km	0~70	GBP-3327192-E6C
	10G SFP+ CWDM	1271~1391nm DML 1271~1571nm DML 1471~1611nm EML	PIN APD APD	1.5W 1.5W 1.8W	10km 10km 40km	-40~+85	GCP-xx192-01T GCP-xx192-01T GCP-xx192-04T
	10G SFP+ DWDM	C18~C61 EML	APD	2W	40km 70km	-40~+85	GDP-xx192-04T GDP-xx192-07T

25G Optical Transceivers

Gigalight provides a complete 25G industrial-grade optical transceiver for 5G fronthaul and metro telecom transmission, which conforms to the 25G Ethernet transmission protocol, and is also compatible with CPRI Option 10 and 25G eCPRI transmission protocols, supporting a transmission distance of 100m to 40km. They have very competitive cost performance, reliable quality and stability, and are ideal for 5G fronthaul network deployment.

Images	Product Name	TX	RX	Max. Power Consumption	Reach	Temp (°C)	Part Number
	25G SFP28 SR	850nm VCSEL	PIN	1W	100m 300m	-40~+85	GSS-MPO250-SRT GSS-MPO250-CSRT
	25G SFP28 LR	1310nm DML	PIN	1.2W	10km 20km	-40~+85	GSS-SPO250-LRT GSS-SPO250-L2T
	25G SFP28 ER	1310nm EML	APD	1.8W	40km	-40~+85	GSS-SPO250-ERT
	25G SFP28 BR10-U	1270/1330nm DML	PIN	1.5W	10km	-40~+85	GBP-2733250-LRT
	25G SFP28 BR10-D	1330/1270nm DML	PIN	1.5W	10km	-40~+85	GBP-3327250-LRT
	25G SFP28 BR20-U	1270/1330nm DML	APD	1.8W	20km	-40~+85	GBP-2733250-L2T
	25G SFP28 BR20-D	1330/1270nm DML	APD	1.8W	20km	-40~+85	GBP-3327250-L2T
	25G SFP28 BR40-U	1270/1310nm EML	APD	1.9W	40km	-40~+85	GBP-2731250-ERT
		1270/1330nm EML					GBP-2733250-ERT
	25G SFP28 BR40-D	1310/1270nm EML	APD	1.9W	40km	-40~+85	GBP-3127250-ERT
		1330/1270nm EML					GBP-3327250-ERT
	25G SFP28 CWDM	1271~1371nm DML 1471~1571nm EML 1271~1371nm DML	PIN APD APD	1.8W	10km 10km 15km	-40~+85	GSS-Cxx250-LRT GSS-Cxx250-LRT GSS-Cxx250-LST
	25G SFP28 LWDM	1269.23~1318.35nm DML 1269.23~1318.35nm DML 1273.55~1309.14nm EML	PIN APD APD	1.5W 1.8W 2W	10km 20km 40km	-40~+85	GSS-Sxx250-LRT GSS-Sxx250-L2T GSS-Sxx250-ERT
	25G SFP28 DWDM	C-BAND EML	PIN APD	1.8W 2W	2km 10km	-40~+85	GSS-Dxx250-02T GSS-Dxx250-LRT
	25G SFP28 DWDM	O-BAND DML	PIN	1.8W	10km	-40~+85	GSS-Oxx250-LRT
	25G SFP28 DWDM	O-BAND DML	APD	2W	40km	-40~+85	GSS-Oxx250-ERT

50G Optical Transceivers

















Gigalight provides industrial-grade 50G optical transceivers for 5G fronthaul and metropolitan telecom transmission, which conform to the 50G Ethernet transmission protocol, and are also compatible with the 50G eCPRI transmission protocol, and comply with the applicable parts of SFF-8402, SFF-8432 and SFF-8431. Support 100m to 30km transmission distance. They have very competitive cost performance, reliable quality and stability, and are ideal for 5G fronthaul network deployment.

Images	Product Name	TX	RX	Max. Power Consumption	Reach	Temp (°C)	Part Number
	50G SFP56 SR	850nm VCSEL	PIN	2W	100m	0~70 -40~+85	GSS-MPO560-SRC GSS-MPO560-SRT
	50G SFP56 LR	1310nm EML	PIN	3W	10km	0~70 -40~+85	GSS-SPO500-LR1C GSS-SPO500-LR1T
	50G SFP56 ER	1310nm EML	APD	3W	40km	0~70 -40~+85	GSS-SPO500-ER1C GSS-SPO500-ER1T
	50G SFP56 BR20-D	1330/1270nm EML	PIN	3W	20km	0~70 -40~+85	GBS-3327500-L2C GBS-3327500-L2T
	50G SFP56 BR20-U	1270/1330nm EML	PIN	3W	20km	0~70 -40~+85	GBS-2733500-L2C GBS-2733500-L2T
	50G SFP56 BR30-D	1310/1270nm EML	APD	3W	30km	0~70 -40~+85	GBS-3127500-L3C GBS-3127500-L3T
	50G SFP56 BR30-U	1270/1310nm EML	APD	3W	30km	0~70 -40~+85	GBS-2731500-L3C GBS-2731500-L3T
	50G SFP56 DWDM	C-BAND EML	PIN	3W	5km	0~70 -40~+85	GSS-Dxx500-05C GSS-Dxx500-05T
	50G SFP56 DWDM*	O-BAND DML	PIN	3W	10km	0~70 -40~+85	GSS-Oxx500-LRC GSS-Oxx500-LRT

Note: * It's preliminary











100G Optical Transceivers

Gigalight 5G series 100G optical transceivers include parallel, WDM, single lambda, and silicon photonics series, which can be used for 5G fronthaul, midhaul and backhaul applications. They adopt LC or MPO optical ports and are compatible with IEEE802.3bm, SFF-8636 and other standards. It has the characteristics of low power consumption, high density and reliable quality assurance.

Images	Product Name	TX	RX	Max. Power Consumption	Reach	Temp (°C)	Part Number
	100G QSFP28 SR4	850nm VCSEL	PIN	2W	100m	0~70 -40~+85	GQS-MPO101-SR4C GQS-MPO101-SR4T
	100G QSFP28 eSR4	850nm VCSEL	PIN	2W	300m	0~70 -40~+85	GQS-MPO101-eSR4C GQS-MPO101-eSR4T
	100G QSFP28 PSM4	1310nm DML	PIN	3.5W	2km	0~70 -40~+85	GQM-SPO101-IR4C GQM-SPO101-IR4T
	100G QSFP28 LR4	LWDM4 DML	PIN	3.5W	10km 20km	0~70 -40~+85	GQS-SPO101-LR4C GQS-SPO101-LR4T GQS-SPO111-LR4C GQS-SPO111-L24C
	100G QSFP28 ER4 Lite	LWDM4 DML	APD	3.8W	30km	0~70	GQS-SPO111-ES4C
	100G QSFP28 ER4	LWDM4 EML	PIN+SOA	6W	40km	0~70	GQS-SPO111-ER4C
	100G QSFP28 ZR4	LWDM4 EML	PIN+SOA	6W	80km	0~70	GQS-SPO101-ZR4C
	100G QSFP28 PSM DWDM4	O-band150GHz DML	PIN+SOA	6W	40km	0~70	GQS-Oxx101-DZR4
	100G QSFP28 PSM DWDM4	C-band100GHz EML	PIN+EDFA+DCM	4.5W	80km	0~70	GQS-Cxx101-DZR4
	100G QSFP28 DWDM1 (SiPh)	O-BAND CW+MZ	PIN	4W	25km	0~70	GQS-SI101-DES1C
	100G QSFP28 LR1	1310nm EML	PIN	4W	20km	0~70	GQS-SPO101-LR1C
	100G QSFP28 LR1 (SiPh)	1310nm CW+MZ	PIN	4W	10km	0~70	GQS-SI101-LR1C
	100G QSFP28 BiDi LR1	1271nm/1331nm EML	PIN	4.5W	10km	0~70	GBQ-2733101-LR1C GBQ-3327101-LR1C
	100G QSFP28 ER1	1310nm EML	APD	4W	40km	0~70	GQS-SPO101-ER1C
	100G SFP56-DD LR1	1310nm EML	PIN	3.5W	20km	0~70	GSD-SPO111-LR1C
	100G SFP56-DD ER1 Lite	1310nm EML	PIN	5.5W	30km	0~70	GSD-SPO111-ER1C

200G Optical Transceivers



Gigalight's 5G series 200G optical transceivers adopts QSFP-DD package and complies with QSFP-DD MSA standard. It can be used for 5G fronthaul, midhaul and backhaul applications. They use LC or MPO optical ports. It has the characteristics of low power consumption, high density and reliable quality assurance.

Images	Product Name	TX	RX	Max. Power Consumption	Reach	Temp (°C)	Part Number
	200G QSFP-DD SR8	850nm VCSEL	PIN	4W	100m	0~70 -40~+85	GQD-MPO201-DSR4C GQD-MPO201-DSR4T
	200G QSFP-DD PSM8	1310nm DML	PIN	6W	2km	0~70 -40~+85	GDM-SPO201-FR8C GDM-SPO201-FR8T
	200G QSFP-DD LR8	LWDM8 DML	PIN	7.5W	10km/20km	0~70	GQD-SPO201-LR8C
	200G QSFP-DD SR4	850nm VCSEL	PIN	5W	100m	0~70	GQD-SPO201-SR4C
	200G QSFP-DD PSM4	1310nm EML	PIN	5.5W	2km	0~70	GDM-SPO201-FR4C
	200G QSFP-DD FR4	CWDM EML	PIN	9W	2km	0~70	GQD-SPO201-FR4C
	200G QSFP-DD LR4	LWDM4 EML	PIN	9W	10km	0~70	GQD-SPO201-LR4C
	200G QSFP-DD ER4	LWDM4 EML	APD	9W	40km	0~70	GDM-SPO201-ER4C
	200G QSFP-DD PSM DWDM4*	C-BAND EML	PIN+EDFA+DCM	10W	80km	0~70	GQD-Dxx201-LR4C
	200G QSFP-DD PSM DWDM4*	O-BAND DML	PIN	10W	25km	0~70	GQD-Oxx201-LR4C

Note: * It's preliminary







400G Optical Transceivers

Gigalight 5G series 400G optical transceivers are packaged in QSFP-DD and conform to the QSFP-DD MSA standard. Available for 5G fronthaul, midhaul and backhaul applications, they adopt LC or MPO optical ports. It has the characteristics of low power consumption, high density and reliable quality assurance.

Images	Product Name	TX	RX	Max. Power Consumption	Reach	Temp (°C)	Part Number
	400G QSFP-DD SR8	850nm VCSEL	PIN	8.5W	100m	0~70	GQD-MPO401-SR8C
	400G QSFP-DD PSM8	1310nm EML	PIN	11W	2km 10km	0~70	GDM-SPO401-FR8C GDM-SPO401-LR8C
	400G QSFP-DD LR8	LWDM8 EML	PIN	12.5W	10km	0~70	GQD-SPO401-LR8C
	400G QSFP-DD LR4	CWDM4 EML	PIN	12W	10km	0~70	GQD-SPO401-LR4C








Coherent Optical Modules

Gigalight provides a series of digital coherent optical modules for 5G and metro telecom transmission, which conform to Ethernet and OTN optical transport network protocols, save fiber resources, and provide ultra-long-distance transmission options.

Images	Product Name	Modulation	OSNR Min (dB/0.1nm)	Max. Power Consumption	Reach	Temp (°C)	Part Number
	100G CFP DCO	100G PM-QPSK	13dB/0.1nm	21W/ 22W/ 28W	120km/ 600km/ 2000km	0~70	GCF-S101-xx-xTCA
	100G CFP2 DCO	100G PM-QPSK	11.5dB/0.1nm	22W	800km/ 2000km	0~70	GF2-S101-xx-xTCA
	200G CFP2 DCO	200G PM-16QAM	17.5dB/0.1nm	22W	800km/ 2000km	0~70	GF2-S201-xx-xTCA
	400G CFP2 DCO	400G PM-16QAM	23dB/0.1nm	22W	400km	0~70	GF2-S401-MR-1TCB
	400G QSFP-DD ZR	400G PM-16QAM	26dB/0.1nm	16.5W	120km	0~70	GQ4-S401-ZR
	400G QSFP-DD ZR+	400G PM-16QAM	24dB/0.1nm	22W	400km	0~70	GQ4-S401-xR





5G Base Station Immersible Transceiver Assemblies

GIGALIGHT provides a full range of 25G SFP28 & 100G QSFP28 immersible transceiver assemblies for scenarios with high heat dissipation requirements and immersion liquid-cooling technology in 5G fronthaul applications. These products are compatible with fluorinated fluids and mineral oils, and remain highly reliable even at submersion depths up to 10 meters.

Images	Product	Transmitter	Receiver	Reach	Optical Interface	Max. Power Consumption (W)	Part Number
	10G SFP+ LR	1310nm DML	PIN	10km	LC Pigtail FC Pigtail	0.8	GL-S100-LR-L/F
	10G SFP+ BiDi LR	1270nm/ 1310nm DML	PIN	10km	LC Pigtail FC Pigtail	1.5	GL-S100-23LR-L/F GL-S100-32LR-L/F
	25G SFP28 LR	1310nm DML	PIN	10km(SMF)	LC Pigtail FC Pigtail	1	GL-S250-LR-L/F
	25G SFP28 BiDi LR	1270nm/ 1310nm DML	PIN	10km	LC Pigtail FC Pigtail	1.6	GL-S250-23LR-L/F GL-S250-32LR-L/F
	100G QSFP28 SR4	850nm VCSEL	PIN	70m(OM3) 100m(OM4)	MPO12 Pigtail	2	GL-Q101-SR4-M
	100G QSFP28 PSM4	1310nm DML	PIN	2km	MPO12 Pigtail	3.5	GL-P101-IR4-M
	200G QSFP56 SR4	850nm VCSEL	PIN	70m(OM3) 100m(OM4)	MPO12 Pigtail	5	GL-Q201SR4-M(D)xx

5G Fronthaul Hardened Active Optical Cables

GIGALIGHT provides a full range of 10G SFP+, 25G SFP28 & 100G QSFP28 Hardened Active Optical Cable (HAOC) assemblies for scenarios with high requirements for waterproof, dustproof and anti-interference in 5G fronthaul applications.

Images	Product Name	Fiber Type	Length (Customizable)	Form Factor	TX	RX	Max. Power Consumption	Temp (°C)	Part Number
	10G SFP+ HAOC	MMF	300m	SFP+ SFP+	850nm VCSEL	PIN	0.8W/0.8W	-40~+85	GSS-MDO100-xxxT
	25G SFP28 HAOC	MMF	70m/100m	SFP28 SFP28	850nm VCSEL	PIN	1W/1W	-40~+85	GSS-MDO250-xxxT
	100G QSFP28 HAOC	MMF	70m/100m	QSFP28 QSFP28	850nm VCSEL	PIN	2W/2W	-40~+85	GQS-MDO101-xxxT
	100G QSFP28 to 4x25G SFP28 HAOC	MMF	1m~100m	QSFP28 4xSFP28	850nm VCSEL	PIN	2W/4x1W	-40~+85	GQP-MDO101-xxxT